



09, 883, 118.

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PATENT
Customer No. 22,852
Attorney Docket No. 6832.0017

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re U.S. Patent No.: 6,905,688)
Inventors:)
Craig A. Rosen and William A. Haseltine)
Issue Date.: June 14, 2005)
For: ALBUMIN FUSION PROTEINS)

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

03/08/2006 SZEWDIE1 00000067 6905688
01 FC:1811 100.00 OP

Sir:

REQUEST FOR CERTIFICATE OF CORRECTION

Pursuant to 35 U.S.C. §§ 254 and 255, and 37 C.F.R. §§ 1.322 and 1.323, this is a request for a Certificate of Correction in the above-identified patent. Some of the mistakes identified in the appended Form occurred through the fault of the Patent Office, as clearly disclosed by the records of the application which matured into this patent.

For example, the priority claims to Provisional Application Nos. 60/256,931, filed December 21, 2000; 60/199,384, filed April 25, 2000; and 60/229,358, filed April 12, 2000, were deleted in an Amendment filed June 3, 2004, and a Corrected Filing Receipt reflecting the change was mailed by the PTO on June 21, 2004. However, the issued patent was printed with the priority claims in the title page under item (60) and in the first paragraph of the specification.

MAR 9 2006

Moreover, the issued patent reflects the original Sequence Listing filed rather than the Substitute Sequence Listing submitted on May 12, 2004. The Sequence Listing in the attached Certificate of Correction is identical to the Substitute Sequence Listing filed on May 12, 2004, and is also identical to the computer readable copy of the Substitute Sequence Listing also submitted on May 18, 2004. Thus, the correction contains no new matter.

Finally, the issued patent contains an error in the claims due to an Office mistake. The issued claims are based on an Examiner's Amendment mailed with a Notice of Allowance dated February 12, 2004. Claim 4 recited "in vivo biological activity" in the Examiner's Amendment but the patent issued as "in viva biological activity." The Certificate of Correction corrects this typographical error.

Other mistakes identified in the appended Form are of a clerical or typographical nature, or of minor character, and resulted from an error made in good faith by Patentees by failing to bring to the attention of the Examiner the clerical/typographical errors in the claims presented in the Examiner's Amendment of February 12, 2004.

A check in the amount of \$100 (the fee set forth in 37 C.F.R. § 1.20(a)) is attached. Should a check not be appended or should any additional fees be needed, authorization is hereby given to charge any fees due in connection with the filing of this request to Deposit Account No. 06-0916.

Two (2) copies of PTO Form 1050 are appended. The complete Certificate of Correction involves twenty-seven (27) pages. Issuance of the Certificate of Correction containing the correction is earnestly requested.

Please charge any required fees not included herewith to our deposit account
06-0916.

Respectfully submitted,

FINNEGAN, HENDERSON, FARABOW,
GARRETT & DUNNER, L.L.P.

Dated: March 7, 2006

By: Charles E. Van Horn
Charles E. Van Horn
Reg. No. 40,266

UNITED STATES PATENT AND TRADEMARK OFFICE
CERTIFICATE OF CORRECTION

PATENT NO. 6,905,688

APPLICATION NO.: 09/833,118

ISSUE DATE: June 14, 2005

INVENTOR(S): Craig A. Rosen et al.

It is hereby certified that an error or errors appear in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

In the Title Page

Under item (60) (Related U.S. Application Data) of the title page, delete the text beginning with "Provisional application No. 60/229,358" to and ending "provisional application No. 60/199,384, filed on Apr. 25, 2000."

In the Specification:

Col. 1, line 3, delete the text beginning with "This application" to and ending "in its entirety." in col. 1, line 8.

In the Claims:

Col. 292, lines 36-37, in claim 1(j), delete the text "wherein the brain derived neurotrophic factor protein or fragment thereof,".

Col. 292, line 57, in claim 4, "viva" should read --vivo--.

Col. 294, line 15, in claim 15, delete "any of".

Col. 294, line 17, in claim 16, delete "any of".

In the Sequence Listing:

Delete the Sequence Listing beginning in Col. 263, beginning with the text "<160> NUMBER OF SEQ ID NOS: 35" to and ending "<400> SEQUENCE: 35

Met Pro Thr Trp Ala Trp Trp Leu Phe Leu Val Leu Leu Leu Ala Leu
1 5 10 15

MAILING ADDRESS OF SENDER

U.S. Patent No. 6,905,688

Finnegan, Henderson, Farabow,
Garrett & Dunner, L.L.P.
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Trp Ala Pro Ala Arg Gly"

20

in Col. 292 and insert the following Sequence Listing:

<160> NUMBER OF SEQ ID NOS: 45

<210> 1
<211> 23
<212> DNA
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<220>
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<213> Artificial Sequence

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<210> 8
<211> 21

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<212> DNA
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<211> 63
<212> DNA

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<213> Artificial Sequence

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<223> synthetic oligonucleotide used to join DNA
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Glu Asn Phe Lys Ala Leu Val Leu Ile Ala Phe Ala Gln Tyr Leu Gln
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cag tgt cca ttt gaa gat cat gta aaa ttatgtg aat gaa gta act gaa 144
Gln Cys Pro Phe Glu Asp His Val Lys Leu Val Asn Glu Val Thr Glu
35 40 45

ttt gca aaa aca tgt gtt gct gat gag tca gct gaa aat tgt gac aaa 192
Phe Ala Lys Thr Cys Val Ala Asp Glu Ser Ala Glu Asn Cys Asp Lys
50 55 60

tca ctt cat acc ctt ttt gga gac aaa ttatgcaca gtt gca act ctt 240
Ser Leu His Thr Leu Phe Gly Asp Lys Leu Cys Thr Val Ala Thr Leu
65 70 75 80

cgt gaa acc tat ggt gaa atg gct gac tgc tgt gca aaa caa gaa cct 288
Arg Glu Thr Tyr Gly Glu Met Ala Asp Cys Cys Ala Lys Gln Glu Pro
85 90 95

gag aga aat gaa tgc ttc ttg caa cac aaa gat gac aac cca aac ctc 336
Glu Arg Asn Glu Cys Phe Leu Gln His Lys Asp Asp Asn Pro Asn Leu
100 105 110

ccc cga ttg gtg aga cca gag gtt gat gtg atg tgc act gct ttt cat 384
Pro Arg Leu Val Arg Pro Glu Val Asp Val Met Cys Thr Ala Phe His
115 120 125

gac aat gaa gag aca ttt ttg aaa aaa tac tta tat gaa att gcc aga 432
Asp Asn Glu Glu Thr Phe Leu Lys Lys Tyr Leu Tyr Glu Ile Ala Arg

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130

135

140

| | | | | |
|---|-----|-----|-----|------|
| aga cat cct tac ttt tat gcc ccg gaa ctc ctt ttc ttt gct aaa agg Arg His Pro Tyr Phe Tyr Ala Pro Glu Leu Leu Phe Phe Ala Lys Arg 145 | 150 | 155 | 160 | 480 |
| tat aaa gct gct ttt aca gaa tgt tgc caa gct gct gat aaa gct gcc Tyr Lys Ala Ala Phe Thr Glu Cys Cys Gln Ala Ala Asp Lys Ala Ala 165 | 170 | 175 | | 528 |
| tgc ctg ttg cca aag ctc gat gaa ctt cg ^g gat gaa ggg aag gct tcg Cys Leu Leu Pro Lys Leu Asp Glu Leu Arg Asp Glu Gly Lys Ala Ser 180 | 185 | 190 | | 576 |
| tct gcc aaa cag aga ctc aaa tgt gcc agt ctc caa aaa ttt gga gaa Ser Ala Lys Gln Arg Leu Lys Cys Ala Ser Leu Gln Lys Phe Gly Glu 195 | 200 | 205 | | 624 |
| aga gct ttc aaa gca tgg gca gtg gct cgc ctg agc cag aga ttt ccc Arg Ala Phe Lys Ala Trp Ala Val Ala Arg Leu Ser Gln Arg Phe Pro 210 | 215 | 220 | | 672 |
| aaa gct gag ttt gca gaa gtt tcc aag tta gtg aca gat ctt acc aaa Lys Ala Glu Phe Ala Glu Val Ser Lys Leu Val Thr Asp Leu Thr Lys 225 | 230 | 235 | 240 | 720 |
| gtc cac acg gaa tgc tgc cat gga gat ctg ctt gaa tgt gct gat gac Val His Thr Glu Cys Cys His Gly Asp Leu Leu Glu Cys Ala Asp Asp 245 | 250 | 255 | | 768 |
| agg gcg gac ctt gcc aag tat atc tgt gaa aat cag gat tcg atc tcc Arg Ala Asp Leu Ala Lys Tyr Ile Cys Glu Asn Gln Asp Ser Ile Ser 260 | 265 | 270 | | 816 |
| agt aaa ctg aag gaa tgc tgt gaa aaa cct ctg ttg gaa aaa tcc cac Ser Lys Leu Lys Glu Cys Cys Glu Lys Pro Leu Leu Glu Lys Ser His 275 | 280 | 285 | | 864 |
| tgc att gcc gaa gtg gaa aat gat gag atg cct gct gac ttg cct tca Cys Ile Ala Glu Val Glu Asn Asp Glu Met Pro Ala Asp Leu Pro Ser 290 | 295 | 300 | | 912 |
| tta gct gct gat ttt gtt gaa agt aag gat gtt tgc aaa aac tat gct Leu Ala Ala Asp Phe Val Glu Ser Lys Asp Val Cys Lys Asn Tyr Ala 305 | 310 | 315 | 320 | 960 |
| gag gca aag gat gtc ttc ctg ggc atg ttt ttg tat gaa tat gca aga Glu Ala Lys Asp Val Phe Leu Gly Met Phe Leu Tyr Glu Tyr Ala Arg 325 | 330 | 335 | | 1008 |
| agg cat cct gat tac tct gtc gtg ctg ctg ctg aga ctt gcc aag aca Arg His Pro Asp Tyr Ser Val Val Leu Leu Leu Arg Leu Ala Lys Thr 340 | 345 | 350 | | 1056 |
| tat gaa acc act cta gag aag tgc tgt gcc gct gca gat cct cat gaa Tyr Glu Thr Thr Leu Glu Lys Cys Cys Ala Ala Asp Pro His Glu 355 | 360 | 365 | | 1104 |

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<210> 18
 <211> 585
 <212> PRT
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Gln Cys Pro Phe Glu Asp His Val Lys Leu Val Asn Glu Val Thr Glu
 35 40 45

Phe Ala Lys Thr Cys Val Ala Asp Glu Ser Ala Glu Asn Cys Asp Lys
 50 55 60

Ser Leu His Thr Leu Phe Gly Asp Lys Leu Cys Thr Val Ala Thr Leu
 65 70 75 80

Arg Glu Thr Tyr Gly Glu Met Ala Asp Cys Cys Ala Lys Gln Glu Pro
 85 90 95

Glu Arg Asn Glu Cys Phe Leu Gln His Lys Asp Asp Asn Pro Asn Leu
 100 105 110

Pro Arg Leu Val Arg Pro Glu Val Asp Val Met Cys Thr Ala Phe His
 115 120 125

Asp Asn Glu Glu Thr Phe Leu Lys Tyr Leu Tyr Glu Ile Ala Arg
 130 135 140

Arg His Pro Tyr Phe Tyr Ala Pro Glu Leu Leu Phe Phe Ala Lys Arg
 145 150 155 160

Tyr Lys Ala Ala Phe Thr Glu Cys Cys Gln Ala Ala Asp Lys Ala Ala
 165 170 175

Cys Leu Leu Pro Lys Leu Asp Glu Leu Arg Asp Glu Gly Lys Ala Ser
 180 185 190

Ser Ala Lys Gln Arg Leu Lys Cys Ala Ser Leu Gln Lys Phe Gly Glu
 195 200 205

Arg Ala Phe Lys Ala Trp Ala Val Ala Arg Leu Ser Gln Arg Phe Pro
 210 215 220

Lys Ala Glu Phe Ala Glu Val Ser Lys Leu Val Thr Asp Leu Thr Lys
 225 230 235 240

Val His Thr Glu Cys Cys His Gly Asp Leu Leu Glu Cys Ala Asp Asp
 245 250 255

Arg Ala Asp Leu Ala Lys Tyr Ile Cys Glu Asn Gln Asp Ser Ile Ser
 260 265 270

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Ser Lys Leu Lys Glu Cys Cys Glu Lys Pro Leu Leu Glu Lys Ser His
 275 280 285
 Cys Ile Ala Glu Val Glu Asn Asp Glu Met Pro Ala Asp Leu Pro Ser
 290 295 300
 Leu Ala Ala Asp Phe Val Glu Ser Lys Asp Val Cys Lys Asn Tyr Ala
 305 310 315 320
 Glu Ala Lys Asp Val Phe Leu Gly Met Phe Leu Tyr Glu Tyr Ala Arg
 325 330 335
 Arg His Pro Asp Tyr Ser Val Val Leu Leu Leu Arg Leu Ala Lys Thr
 340 345 350
 Tyr Glu Thr Thr Leu Glu Lys Cys Cys Ala Ala Ala Asp Pro His Glu
 355 360 365
 Cys Tyr Ala Lys Val Phe Asp Glu Phe Lys Pro Leu Val Glu Glu Pro
 370 375 380
 Gln Asn Leu Ile Lys Gln Asn Cys Glu Leu Phe Glu Gln Leu Gly Glu
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 Tyr Lys Phe Gln Asn Ala Leu Leu Val Arg Tyr Thr Lys Lys Val Pro
 405 410 415
 Gln Val Ser Thr Pro Thr Leu Val Glu Val Ser Arg Asn Leu Gly Lys
 420 425 430
 Val Gly Ser Lys Cys Cys Lys His Pro Glu Ala Lys Arg Met Pro Cys
 435 440 445
 Ala Glu Asp Tyr Leu Ser Val Val Leu Asn Gln Leu Cys Val Leu His
 450 455 460
 Glu Lys Thr Pro Val Ser Asp Arg Val Thr Lys Cys Cys Thr Glu Ser
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 485 490 495
 Tyr Val Pro Lys Glu Phe Asn Ala Glu Thr Phe Thr Phe His Ala Asp
 500 505 510
 Ile Cys Thr Leu Ser Glu Lys Glu Arg Gln Ile Lys Lys Gln Thr Ala
 515 520 525
 Leu Val Glu Leu Val Lys His Lys Pro Lys Ala Thr Lys Glu Gln Leu
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 Lys Ala Val Met Asp Asp Phe Ala Ala Phe Val Glu Lys Cys Cys Lys
 545 550 555 560
 Ala Asp Asp Lys Glu Thr Cys Phe Ala Glu Glu Gly Lys Lys Leu Val
 565 570 575

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Ala Ala Ser Gln Ala Ala Leu Gly Leu
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<400> 22
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10/10/2006

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<221> misc feature
<222> (51)
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<400> 26
gcgcgcgtt aaacggccgg ccggcgcgcc ttattannnn nnnnnnnnnn n
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51

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<210> 27
<211> 33
<212> DNA
<213> Artificial Sequence

<220>
<223> forward primer useful for generation of albumin fusion
protein in which the albumin moiety is c-terminal of the
Therapeutic Protein
```

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<220>
<221> misc feature
<222> (19)
<223> n equals a,t,g, or c

<220>
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MAILING ADDRESS OF SENDER

U.S. Patent No. 6,905,688

Finnegan, Henderson, Farabow,
Garrett & Dunner, L.L.P.
901 New York Avenue, N.W.
Washington, D.C. 20001-4413

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<221> misc feature
<222> (20)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (21)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (22)
<223> n equals a,t,g, or c

<220>
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<222> (23)
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<220>
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<220>
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<220>
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<222> (31)
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U.S. Patent No. 6,905,688

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Garrett & Dunner, L.L.P.
901 New York Avenue, N.W.
Washington, D.C. 20001-4413

<223> n equals a,t,g, or c
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<222> (32)
<223> n equals a,t,g, or c

<220>
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<400> 27
aggagcgtcg acaaaagannnnnnnnnnnnnn
33

<210> 28
<211> 52
<212> DNA
<213> Artificial Sequence

<220>
<221> primer_bind
<223> reverse primer useful for generation of albumin fusion protein in which the albumin moiety is c-terminal of the Therapeutic Protein

<220>
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<222> (40)
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<222> (43)
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U.S. Patent No. 6,905,688

Finnegan, Henderson, Farabow,
Garrett & Dunner, L.L.P.
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<222> (46)
<223> n equals a,t,g, or c

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<222> (47)
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<222> (51)
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<223> n equals a,t,g, or c

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ctttaaatcg atgagcaacc tcactttgt gtgcattnnnnnnnnnn nn      52

<210> 29
<211> 24
<212> PRT
<213> Artificial Sequence

<220>
<221> signal
<223> signal peptide of natural human serum albumin protein

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U.S. Patent No. 6,905,688

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```

<400> 29
Met Lys Trp Val Ser Phe Ile Ser Leu Leu Phe Leu Phe Ser Ser Ala
    1           5           10          15

Tyr Ser Arg Ser Leu Asp Lys Arg
    20

<210> 30
<211> 114
<212> DNA
<213> Artificial Sequence

<220>
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<223> forward primer useful for generation of PC4:HSA
albumin fusion VECTOR

<220>
<221> misc_feature
<222> (5)..(10)
<223> BamHI restriction site

<220>
<221> misc_feature
<222> (11)..(16)
<223> Hind III restriction site

<220>
<221> misc_feature
<222> (17)..(27)
<223> Kozak sequence

<220>
<221> misc_feature
<222> (25)..(97)
<223> cds natural signal sequence of human serum albumin

<220>
<221> misc_feature
<222> (75)..(81)
<223> XbaI restriction site

<220>
<221> misc_feature
<222> (98)..(114)
<223> cds first six amino acids of human serum albumin

<400> 30
tcagggatcc aagttccgc caccatgaag tggtaacct ttatccct tcttttctc 60
tttagctcggttactcgag gggtgtgttt cgtcgagatg cacacaagag tgag      114

<210> 31
<211> 43
<212> DNA
<213> Artificial Sequence

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<220>
<221> primer_bind
<223> reverse primer useful for generation of
PC4:HSA albumin fusion VECTOR

<220>
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<222> (6)...(11)
<223> Asp718 restriction site

<220>
<221> misc_feature
<222> (12)...(17)
<223> EcoRI restriction site

<220>
<221> misc_feature
<222> (15)...(17)
<223> reverse complement of stop codon

<220>
<221> misc_feature
<222> (18)...(25)
<223> AscI restriction site

<220>
<221> misc_feature
<222> (18)...(43)
<223> reverse complement of DNA sequence encoding last 9 amino acids

<400> 31
gcagcggtag cgaattcggc gcgccttata agcctaaggc agc 43

<210> 32
<211> 46
<212> DNA
<213> Artificial Sequence

<220>
<221> primer_bind
<223> forward primer useful for inserting Therapeutic
protein into pC4:HSA vector

<220>
<221> misc feature
<222> (29)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (30)
<223> n equals a,t,g, or c

<220>
<221> misc feature

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MAILING ADDRESS OF SENDER

U.S. Patent No. 6,905,688

Finnegan, Henderson, Farabow,
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<222> (31)
<223> n equals a,t,g, or c

<220>
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<222> (32)
<223> n equals a,t,g, or c

<220>
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<222> (33)
<223> n equals a,t,g, or c

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<222> (34)
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<220>
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MAILING ADDRESS OF SENDER

U.S. Patent No. 6,905,688

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Garrett & Dunner, L.L.P.
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<220>
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<223> n equals a,t,g, or c

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<223> n equals a,t,g, or c

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<223> n equals a,t,g, or c

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46

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<210> 33
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<212> DNA
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<220>
<221> primer_bind
<223> reverse primer useful for inserting Therapeutic
protein into pC4:HSA vector
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<220>
<221> misc feature
<222> (38)
<223> n equals a,t,g, or c
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<220>
<221> misc feature
<222> (39)
<223> n equals a,t,g, or c
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<220>
<221> misc feature
<222> (40)
<223> n equals a,t,g, or c
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<220>
<221> misc feature
<222> (41)
<223> n equals a,t,g, or c
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<220>
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<222> (42)
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MAILING ADDRESS OF SENDER

U.S. Patent No. 6,905,688

Finnegan, Henderson, Farabow,
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MAR 9 2000

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<223> n equals a,t,g, or c  
  
<220>  
<221> misc feature  
<222> (43)  
<223> n equals a,t,g, or c  
  
<220>  
<221> misc feature  
<222> (44)  
<223> n equals a,t,g, or c  
  
<220>  
<221> misc feature  
<222> (45)  
<223> n equals a,t,g, or c  
  
<220>  
<221> misc feature  
<222> (46)  
<223> n equals a,t,g, or c  
  
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<221> misc feature  
<222> (47)  
<223> n equals a,t,g, or c  
  
<220>  
<221> misc feature  
<222> (48)  
<223> n equals a,t,g, or c  
  
<220>  
<221> misc feature  
<222> (49)  
<223> n equals a,t,g, or c  
  
<220>  
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<222> (50)  
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<220>  
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<222> (52)  
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MAILING ADDRESS OF SENDER

U.S. Patent No. 6,905,688

Finnegan, Henderson, Farabow,
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MAR 9 2006

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<220>
<221> misc feature
<222> (54)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (55)
<223> n equals a,t,g, or c

<400> 33
agtcccatcg atgagcaacc tcactttgt gtgcacnnnn nnnnnnnnnn nnnnn      55

<210> 34
<211> 17
<212> PRT
<213> Artificial Sequence

<220>
<221> signal
<223> Stanniocalcin signal peptide

<400> 34
Met Leu Gln Asn Ser Ala Val Leu Leu Leu Val Ile Ser Ala Ser
    1           5           10          15

Ala

<210> 35
<211> 22
<212> PRT
<213> Artificial Sequence

<220>
<221> signal
<223> Synthetic signal peptide

<400> 35
Met Pro Thr Trp Ala Trp Trp Leu Phe Leu Val Leu Leu Ala Leu
    1           5           10          15

Trp Ala Pro Ala Arg Gly
    20

<210> 36
<211> 733
<212> DNA
<213> Homo sapiens

<400> 36
ggatccgga gcccaaattct tctgacaaaa ctcacacatg cccaccgtgc ccagcacctg      60
aattcgaggg tgcaccgtca gtcttccctt tccccccaaa acccaaggac accctcatga     120
tctcccgac tcctgaggtc acatgcgtgg tggtgacgt aagccacgaa gaccctgagg     180
tcaagttcaa ctggtacgtg gacggcgtgg aggtgcataa tgccaagaca aagccgcggg     240

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aggagcagta caacagcacg taccgtgtgg tcagcgtcct caccgtcctg caccaggact 300
ggctgaatgg caaggagtac aagtgcagg tctccaacaa agccctccca acccccattcg 360
agaaaaaccat ctccaaagcc aaaggcagc cccgagaacc acaggtgtac accctgcccc 420
catccccggga tgagctgacc aagaaccagg tcagcctgac ctgcctggtc aaaggcttct 480
atccaaggca catcgccgtg gagtgggaga gcaatggca gccggagaac aactacaaga 540
ccacgcctcc cgtgctggac tccgacggct ccttcttcct ctacagcaag ctcaccgtgg 600
acaagagcag gtggcagcag gggAACGTCT tctcatgctc cgtgatgcat gaggctctgc 660
acaaccacta cacgcagaag agcctctccc tgtctccggg taaatgagtg cgacggccgc 720
gactcttagag gat 733

<210> 37
<211> 5
<212> PRT
<213> Artificial sequence

<220>
<221> misc_structure
<223> membrane proximal motif of class 1 cytokine receptors

<220>
<221> misc_feature
<222> (3)
<223> Xaa equals any

<400> 37
Trp Ser Xaa Trp Ser
1 5

<210> 38
<211> 86
<212> DNA
<213> Artificial Sequence

<220>
<221> primer_bind
<223> forward primer useful for generation of a synthetic gamma activation site (GAS) containing promoter element

<400> 38
gcgcctcgag atttccccga aatctagatt tcccccggaaat gatttccccg aaatgatttc 60
cccgaaatat ctgccatctc aattag 86

<210> 39
<211> 27
<212> DNA

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<213> Artificial Sequence

<220>
<221> primer_bind
<223> reverse primer useful for generation of a synthetic gamma activation site
(GAS) containing promoter element

<400> 39
gcggcaagct ttttcaaagg ccttaggc                                         27

<210> 40
<211> 271
<212> DNA
<213> Artificial Sequence

<220>
<221> misc_feature
<223> Synthetic GAS-SV40 promoter sequence

<400> 40
ctcgagattt ccccgaaatc tagatttccc cgaaatgatt tccccgaaat gattccccg      60
aaatatctgc catctcaatt agtcagcaac catagtccccg cccctaactc cgcccatccc     120
gcccctaact ccgcccagg ccgcccattc tccgccccat ggctgactaa ttttttttat     180
ttatgcagag gccgaggccg cctcggcctc tgagctattc cagaagttagt gaggaggctt     240
ttttggaggc ctaggctttt gaaaaagct t                                         271

<210> 41
<211> 32
<212> DNA
<213> Artificial Sequence

<220>
<221> primer_bind
<223> primer useful for generation of a EGR/SEAP reporter construct

<400> 41
gcgctcgagg gatgacagcg atagaacccc gg                                         32

<210> 42
<211> 31
<212> DNA
<213> Artificial Sequence

<220>
<221> primer_bind
<223> primer useful for generation of a EGR/SEAP reporter construct

<400> 42
gcgaagcttc gcgactcccc ggatccgcct c                                         31

<210> 43
<211> 12
<212> DNA

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<213> Artificial Sequence

<220>

<221> misc_binding

<223> NF-KB binding site

<400> 43

ggggacttcc

12

<210> 44

<211> 73

<212> DNA

<213> Artificial Sequence

<220>

<221> primer_bind

<223> forward primer useful for generation of a vector containing the NF-KB promoter element

<400> 44

gcggcctcgaa ggggacttcc cgggggactt tccggggact ttccgggact ttccatcctg

60

ccatctcaat tag

73

<210> 45

<211> 256

<212> DNA

<213> Artificial Sequence

<220>

<221> misc_feature

<223> Synthetic NF-KB/SV40 promoter

<400> 45

ctcgagggga ctttccggg gactttccgg ggactttccg ggactttcca tctgccatct

60

caatttagtca gcaaccatag tcccgccccct aactccgcccc atcccgcccc taactccgccc

120

cagttccgccc cattctccgc cccatggctg actaattttt tttatttatg cagaggccgaa

180

ggccgcctcg gcctctgagc tattccagaa gtatgtgagga ggcttttttg gaggcctagg

240

cttttgcaaa aagctt

256

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UNITED STATES PATENT AND TRADEMARK OFFICE
CERTIFICATE OF CORRECTION

PATENT NO. 6,905,688

APPLICATION NO.: 09/833,118

ISSUE DATE: June 14, 2005

INVENTOR(S): Craig A. Rosen et al.

It is hereby certified that an error or errors appear in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

In the Title Page

Under item (60) (Related U.S. Application Data) of the title page, delete the text beginning with "Provisional application No. 60/229,358" to and ending "provisional application No. 60/199,384, filed on Apr. 25, 2000."

In the Specification:

Col. 1, line 3, delete the text beginning with "This application" to and ending "in its entirety." in col. 1, line 8.

In the Claims:

Col. 292, lines 36-37, in claim 1(j), delete the text "wherein the brain derived neurotrophic factor protein or fragment thereof,".

Col. 292, line 57, in claim 4, "viva" should read --vivo--.

Col. 294, line 15, in claim 15, delete "any of".

Col. 294, line 17, in claim 16, delete "any of".

In the Sequence Listing:

Delete the Sequence Listing beginning in Col. 263, beginning with the text "<160> NUMBER OF SEQ ID NOS: 35" to and ending "<400> SEQUENCE: 35"

Met Pro Thr Trp Ala Trp Trp Leu Phe Leu Val Leu Leu Ala Leu
1 5 10 15

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Trp Ala Pro Ala Arg Gly"

20

in Col. 292 and insert the following Sequence Listing:

<160> NUMBER OF SEQ ID NOS: 45

<210> 1

<211> 23

<212> DNA

<213> Artificial Sequence

<220>

<221> primer_bind

<223> primer useful to clone human growth hormone cDNA

<400> 1

cccaagaatt cccttatcca ggc

23

<210> 2

<211> 33

<212> DNA

<213> Artificial Sequence

<220>

<221> primer_bind

<223> primer useful to clone human growth hormone cDNA

<400> 2

gggaagctta gaagccacag gatccctcca cag

33

<210> 3

<211> 16

<212> DNA

<213> Artificial Sequence

<220>

<221> misc_structure

<223> synthetic oligonucleotide used to join DNA fragments with non-cohesive ends.

<400> 3

gataaagatt cccaac

16

<210> 4

<211> 17

<212> DNA

<213> Artificial Sequence

<220>

<221> misc_structure

<223> synthetic oligonucleotide used to join DNA fragments with non-cohesive ends.

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9 LUUb

<400> 4
aattgttggg aatcttt

17

<210> 5
<211> 17
<212> DNA
<213> Artificial Sequence

<220>
<221> misc_structure
<223> synthetic oligonucleotide used to join DNA fragments with non-cohesive ends.

<400> 5
ttaggcttat tcccaac

17

<210> 6
<211> 18
<212> DNA
<213> Artificial Sequence

<220>
<221> misc_structure
<223> synthetic oligonucleotide used to join DNA fragments with non-cohesive ends.

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18

<210> 7
<211> 24
<212> PRT
<213> Artificial Sequence

<220>
<221> SITE
<222> 1)..(19)
<223> invertase leader sequence

<220>
<221> SITE
<222> 20)..(24)
<223> first 5 amino acids of mature human serum albumin

<400> 7
Met Leu Leu Gln Ala Phe Leu Phe Leu Leu Ala Gly Phe Ala Ala Lys
1 5 10 15

Ile Ser Ala Asp Ala His Lys Ser
20

<210> 8
<211> 21

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<212> DNA
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<220>
<221> misc_structure
<223> synthetic oligonucleotide used to join DNA fragments with non-cohesive ends.

<400> 8
gagatgcaca cctgagttag g

21

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<212> DNA
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<220>
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<223> synthetic oligonucleotide used to join DNA fragments with non-cohesive ends.

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gatccgtgtgg cttcgatgca cacaaga

27

<210> 10
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
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<223> synthetic oligonucleotide used to join DNA fragments with non-cohesive ends.

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cttttgtgtg catcgaagcc acag

24

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<223> synthetic oligonucleotide used to join DNA fragments with non-cohesive ends.

<400> 11
tgttggaaagag cctcagaatt tattcccaac

30

<210> 12
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Garrett & Dunner, L.L.P.
901 New York Avenue, N.W.
Washington, D.C. 20001-4413

MAR 9 2006

<213> Artificial Sequence
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<223> synthetic oligonucleotide used to join DNA fragments with non-cohesive ends.

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<210> 16
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U.S. Patent No. 6,905,688

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Garrett & Dunner, L.L.P.
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MAR 9 2006

<213> Artificial Sequence

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<221> misc_structure

<223> synthetic oligonucleotide used to join DNA
fragments with non-cohesive ends.

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gaa aat ttc aaa gcc ttg gtg ttg att gcc ttt gct cag tat ctt cag 96
Glu Asn Phe Lys Ala Leu Val Leu Ile Ala Phe Ala Gln Tyr Leu Gln
20 25 30

cag tgt cca ttt gaa gat cat gta aaa tta ttg aat gaa gta act gaa 144
Gln Cys Pro Phe Glu Asp His Val Lys Leu Val Asn Glu Val Thr Glu
35 40 45

ttt gca aaa aca tgt gtt gct gat gag tca gct gaa aat tgt gac aaa 192
Phe Ala Lys Thr Cys Val Ala Asp Glu Ser Ala Glu Asn Cys Asp Lys
50 55 60

tca ctt cat acc ctt ttt gga gac aaa tta tgc aca gtt gca act ctt 240
Ser Leu His Thr Leu Phe Gly Asp Lys Leu Cys Thr Val Ala Thr Leu
65 70 75 80

cgt gaa acc tat ggt gaa atg gct gac tgc tgt gca aaa caa gaa cct 288
Arg Glu Thr Tyr Gly Glu Met Ala Asp Cys Cys Ala Lys Gln Glu Pro
85 90 95

gag aga aat gaa tgc ttc ttg caa cac aaa gat gac aac cca aac ctc 336
Glu Arg Asn Glu Cys Phe Leu Gln His Lys Asp Asp Asn Pro Asn Leu
100 105 110

ccc cga ttg gtg aga cca gag gtt gat gtg atg tgc act gct ttt cat 384
Pro Arg Leu Val Arg Pro Glu Val Asp Val Met Cys Thr Ala Phe His
115 120 125

gac aat gaa gag aca ttt ttg aaa aaa tac tta tat gaa att gcc aga 432
Asp Asn Glu Glu Thr Phe Leu Lys Lys Tyr Leu Tyr Glu Ile Ala Arg

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4006

| 130 | 135 | 140 | |
|---|-----|-----|------|
| aga cat cct tac ttt tat gcc ccg gaa ctc ctt ttc ttt gct aaa agg Arg His Pro Tyr Phe Tyr Ala Pro Glu Leu Leu Phe Phe Ala Lys Arg 145 | 150 | 155 | 480 |
| tat aaa gct gct ttt aca gaa tgt tgc caa gct gct gat aaa gct gcc Tyr Lys Ala Ala Phe Thr Glu Cys Cys Gln Ala Ala Asp Lys Ala Ala 165 | 170 | 175 | 528 |
| tgc ctg ttg cca aag ctc gat gaa ctt cgg gat gaa ggg aag gct tcg Cys Leu Leu Pro Lys Leu Asp Glu Leu Arg Asp Glu Gly Lys Ala Ser 180 | 185 | 190 | 576 |
| tct gcc aaa cag aga ctc aaa tgt gcc agt ctc caa aaa ttt gga gaa Ser Ala Lys Gln Arg Leu Lys Cys Ala Ser Leu Gln Lys Phe Gly Glu 195 | 200 | 205 | 624 |
| aga gct ttc aaa gca tgg gca gtg gct cgc ctg agc cag aga ttt ccc Arg Ala Phe Lys Ala Trp Ala Val Ala Arg Leu Ser Gln Arg Phe Pro 210 | 215 | 220 | 672 |
| aaa gct gag ttt gca gaa gtt tcc aag tta gtg aca gat ctt acc aaa Lys Ala Glu Phe Ala Glu Val Ser Lys Leu Val Thr Asp Leu Thr Lys 225 | 230 | 235 | 720 |
| gtc cac acg gaa tgc tgc cat gga gat ctg ctt gaa tgt gct gat gac Val His Thr Glu Cys Cys His Gly Asp Leu Leu Glu Cys Ala Asp Asp 245 | 250 | 255 | 768 |
| agg gcg gac ctt gcc aag tat atc tgt gaa aat cag gat tcg atc tcc Arg Ala Asp Leu Ala Lys Tyr Ile Cys Glu Asn Gln Asp Ser Ile Ser 260 | 265 | 270 | 816 |
| agt aaa ctg aag gaa tgc tgt gaa aaa cct ctg ttg gaa aaa tcc cac Ser Lys Leu Lys Glu Cys Cys Glu Lys Pro Leu Leu Glu Lys Ser His 275 | 280 | 285 | 864 |
| tgc att gcc gaa gtg gaa aat gat gag atg cct gct gac ttg cct tca Cys Ile Ala Glu Val Glu Asn Asp Glu Met Pro Ala Asp Leu Pro Ser 290 | 295 | 300 | 912 |
| tta gct gct gat ttt gtt gaa agt aag gat gtt tgc aaa aac tat gct Leu Ala Ala Asp Phe Val Glu Ser Lys Asp Val Cys Lys Asn Tyr Ala 305 | 310 | 315 | 960 |
| gag gca aag gat gtc ttc ctg ggc atg ttt ttg tat gaa tat gca aga Glu Ala Lys Asp Val Phe Leu Gly Met Phe Leu Tyr Glu Tyr Ala Arg 325 | 330 | 335 | 1008 |
| agg cat cct gat tac tct gtc gtg ctg ctg aga ctt gcc aag aca Arg His Pro Asp Tyr Ser Val Val Leu Leu Leu Arg Leu Ala Lys Thr 340 | 345 | 350 | 1056 |
| tat gaa acc act cta gag aag tgc tgt gcc gct gca gat cct cat gaa Tyr Glu Thr Thr Leu Glu Lys Cys Cys Ala Ala Asp Pro His Glu 355 | 360 | 365 | 1104 |

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| | |
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| tgc tat gcc aaa gtg ttc gat gaa ttt aaa cct ctt gtg gaa gag cct Cys Tyr Ala Lys Val Phe Asp Glu Phe Lys Pro Leu Val Glu Glu Pro 370 375 380 | 1152 |
| cag aat tta atc aaa caa aac tgt gag ctt ttt gag cag ctt gga gag Gln Asn Leu Ile Lys Gln Asn Cys Glu Leu Phe Glu Gln Leu Gly Glu 385 390 395 400 | 1200 |
| tac aaa ttc cag aat gcg cta tta gtt cgt tac acc aag aaa gta ccc Tyr Lys Phe Gln Asn Ala Leu Leu Val Arg Tyr Thr Lys Lys Val Pro 405 410 415 | 1248 |
| caa gtg tca act cca act ctt gta gag gtc tca aga aac cta gga aaa Gln Val Ser Thr Pro Thr Leu Val Glu Val Ser Arg Asn Leu Gly Lys 420 425 430 | 1296 |
| gtg ggc agc aaa tgt tgt aaa cat cct gaa gca aaa aga atg ccc tgt Val Gly Ser Lys Cys Cys Lys His Pro Glu Ala Lys Arg Met Pro Cys 435 440 445 | 1344 |
| gca gaa gac tat cta tcc gtg gtc ctg aac cag tta tgt gtg ttg cat Ala Glu Asp Tyr Leu Ser Val Val Leu Asn Gln Leu Cys Val Leu His 450 455 460 | 1392 |
| gag aaa acg cca gta agt gac aga gtc aca aaa tgc tgc aca gag tcc Glu Lys Thr Pro Val Ser Asp Arg Val Thr Lys Cys Cys Thr Glu Ser 465 470 475 480 | 1440 |
| ttg gtg aac agg cga cca tgc ttt tca gct ctg gaa gtc gat gaa aca Leu Val Asn Arg Arg Pro Cys Phe Ser Ala Leu Glu Val Asp Glu Thr 485 490 495 | 1488 |
| tac gtt ccc aaa gag ttt aat gct gaa aca ttc acc ttc cat gca gat Tyr Val Pro Lys Glu Phe Asn Ala Glu Thr Phe Thr Phe His Ala Asp 500 505 510 | 1536 |
| ata tgc aca ctt tct gag aag gag aga caa atc aag aaa caa act gca Ile Cys Thr Leu Ser Glu Lys Glu Arg Gln Ile Lys Lys Gln Thr Ala 515 520 525 | 1584 |
| ctt gtt gag ctt gtg aaa cac aag ccc aag gca aca aaa gag caa ctg Leu Val Glu Leu Val Lys His Lys Pro Lys Ala Thr Lys Glu Gln Leu 530 535 540 | 1632 |
| aaa gct gtt atg gat gat ttc gca gct ttt gta gag aag tgc tgc aag Lys Ala Val Met Asp Asp Phe Ala Ala Phe Val Glu Lys Cys Cys Lys 545 550 555 560 | 1680 |
| gct gac gat aag gag acc tgc ttt gcc gag gag ggt aaa aaa ctt gtt Ala Asp Asp Lys Glu Thr Cys Phe Ala Glu Glu Gly Lys Lys Leu Val 565 570 575 | 1728 |
| gct gca agt caa gct gcc tta ggc tta taacatctac attaaaaagc atctcag Ala Ala Ser Gln Ala Ala Leu Gly Leu 580 585 | 1782 |

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Gln Cys Pro Phe Glu Asp His Val Lys Leu Val Asn Glu Val Thr Glu
35 40 45

Phe Ala Lys Thr Cys Val Ala Asp Glu Ser Ala Glu Asn Cys Asp Lys
50 55 60

Ser Leu His Thr Leu Phe Gly Asp Lys Leu Cys Thr Val Ala Thr Leu
65 70 75 80

Arg Glu Thr Tyr Gly Glu Met Ala Asp Cys Cys Ala Lys Gln Glu Pro
85 90 95

Glu Arg Asn Glu Cys Phe Leu Gln His Lys Asp Asp Asn Pro Asn Leu
100 105 110

Pro Arg Leu Val Arg Pro Glu Val Asp Val Met Cys Thr Ala Phe His
115 120 125

Asp Asn Glu Glu Thr Phe Leu Lys Tyr Leu Tyr Glu Ile Ala Arg
130 135 140

Arg His Pro Tyr Phe Tyr Ala Pro Glu Leu Leu Phe Phe Ala Lys Arg
145 150 155 160

Tyr Lys Ala Ala Phe Thr Glu Cys Cys Gln Ala Ala Asp Lys Ala Ala
165 170 175

Cys Leu Leu Pro Lys Leu Asp Glu Leu Arg Asp Glu Gly Lys Ala Ser
180 185 190

Ser Ala Lys Gln Arg Leu Lys Cys Ala Ser Leu Gln Lys Phe Gly Glu
195 200 205

Arg Ala Phe Lys Ala Trp Ala Val Ala Arg Leu Ser Gln Arg Phe Pro
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Lys Ala Glu Phe Ala Glu Val Ser Lys Leu Val Thr Asp Leu Thr Lys
225 230 235 240

Val His Thr Glu Cys Cys His Gly Asp Leu Leu Glu Cys Ala Asp Asp
245 250 255

Arg Ala Asp Leu Ala Lys Tyr Ile Cys Glu Asn Gln Asp Ser Ile Ser
260 265 270

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Ser Lys Leu Lys Glu Cys Cys Glu Lys Pro Leu Leu Glu Lys Ser His
 275 280 285

 Cys Ile Ala Glu Val Glu Asn Asp Glu Met Pro Ala Asp Leu Pro Ser
 290 295 300

 Leu Ala Ala Asp Phe Val Glu Ser Lys Asp Val Cys Lys Asn Tyr Ala
 305 310 315 320

 Glu Ala Lys Asp Val Phe Leu Gly Met Phe Leu Tyr Glu Tyr Ala Arg
 325 330 335

 Arg His Pro Asp Tyr Ser Val Val Leu Leu Leu Arg Leu Ala Lys Thr
 340 345 350

 Tyr Glu Thr Thr Leu Glu Lys Cys Cys Ala Ala Ala Asp Pro His Glu
 355 360 365

 Cys Tyr Ala Lys Val Phe Asp Glu Phe Lys Pro Leu Val Glu Glu Pro
 370 375 380

 Gln Asn Leu Ile Lys Gln Asn Cys Glu Leu Phe Glu Gln Leu Gly Glu
 385 390 395 400

 Tyr Lys Phe Gln Asn Ala Leu Leu Val Arg Tyr Thr Lys Lys Val Pro
 405 410 415

 Gln Val Ser Thr Pro Thr Leu Val Glu Val Ser Arg Asn Leu Gly Lys
 420 425 430

 Val Gly Ser Lys Cys Cys Lys His Pro Glu Ala Lys Arg Met Pro Cys
 435 440 445

 Ala Glu Asp Tyr Leu Ser Val Val Leu Asn Gln Leu Cys Val Leu His
 450 455 460

 Glu Lys Thr Pro Val Ser Asp Arg Val Thr Lys Cys Cys Thr Glu Ser
 465 470 475 480

 Leu Val Asn Arg Arg Pro Cys Phe Ser Ala Leu Glu Val Asp Glu Thr
 485 490 495

 Tyr Val Pro Lys Glu Phe Asn Ala Glu Thr Phe Thr Phe His Ala Asp
 500 505 510

 Ile Cys Thr Leu Ser Glu Lys Glu Arg Gln Ile Lys Lys Gln Thr Ala
 515 520 525

 Leu Val Glu Leu Val Lys His Lys Pro Lys Ala Thr Lys Glu Gln Leu
 530 535 540

 Lys Ala Val Met Asp Asp Phe Ala Ala Phe Val Glu Lys Cys Cys Lys
 545 550 555 560

 Ala Asp Asp Lys Glu Thr Cys Phe Ala Glu Glu Gly Lys Lys Leu Val
 565 570 575

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9 2006

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29

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MAR 9 2006

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Q 2006

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Washington, D.C. 20001-4413

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M/F - 6/2006

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MAR 9 2006
2006

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52

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MAP 0 Z000

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 Met Lys Trp Val Ser Phe Ile Ser Leu Leu Phe Leu Phe Ser Ser Ala
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 Tyr Ser Arg Ser Leu Asp Lys Arg
 20
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 <211> 114
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 <223> forward primer useful for generation of PC4:HSA
 albumin fusion VECTOR
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 <222> (5)..(10)
 <223> BamHI restriction site
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 <222> (11)..(16)
 <223> Hind III restriction site
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 <222> (17)..(27)
 <223> Kozak sequence
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 <221> misc_feature
 <222> (25)..(97)
 <223> cds natural signal sequence of human serum albumin
 <220>
 <221> misc_feature
 <222> (75)..(81)
 <223> XhoI restriction site
 <220>
 <221> misc_feature
 <222> (98)..(114)
 <223> cds first six amino acids of human serum albumin
 <400> 30
 tcagggatcc aagttccgc caccatgaag tggtaacct ttatccct tcttttctc 60
 tttagctcggttactcgag ggggtgtgtt cgtcgagatg cacacaagag tgag 114
 <210> 31
 <211> 43
 <212> DNA
 <213> Artificial Sequence

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 Garrett & Dunner, L.L.P.
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```

<220>
<221> primer_bind
<223> reverse primer useful for generation of
PC4:HSA albumin fusion VECTOR

<220>
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<222> (6)..(11)
<223> Asp718 restriction site

<220>
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<222> (12)..(17)
<223> EcoRI restriction site

<220>
<221> misc_feature
<222> (15)..(17)
<223> reverse complement of stop codon

<220>
<221> misc_feature
<222> (18)..(25)
<223> AscI restriction site

<220>
<221> misc_feature
<222> (18)..(43)
<223> reverse complement of DNA sequence encoding last 9 amino acids

<400> 31
gcagcggtac cgaattcggc ggcgcctata agcctaaggc agc 43

<210> 32
<211> 46
<212> DNA
<213> Artificial Sequence

<220>
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<223> forward primer useful for inserting Therapeutic
protein into pC4:HSA vector

<220>
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<222> (29)
<223> n equals a,t,g, or c

<220>
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<223> n equals a,t,g, or c

<220>
<221> misc feature

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2006

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<222> (31)
<223> n equals a,t,g, or c

<220>
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<220>
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<220>
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<222> (46)
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<210> 33
<211> 55
<212> DNA
<213> Artificial Sequence

<220>
<221> primer_bind
<223> reverse primer useful for inserting Therapeutic
protein into pC4:HSA vector

<220>
<221> misc feature
<222> (38)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (39)
<223> n equals a,t,g, or c

<220>
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<222> (40)
<223> n equals a,t,g, or c

<220>
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<222> (41)
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<220>
<221> misc feature
<222> (42)
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<223> n equals a,t,g, or c  
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<221> misc feature  
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0 4000

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<220>
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<220>
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<400> 33
agtcccatcg atgagcaacc tcactttgt gtgcacnnnn nnnnnnnnnn nnnnn      55

<210> 34
<211> 17
<212> PRT
<213> Artificial Sequence

<220>
<221> signal
<223> Stanniocalcin signal peptide

<400> 34
Met Leu Gln Asn Ser Ala Val Leu Leu Leu Val Ile Ser Ala Ser
1           5           10          15

Ala

<210> 35
<211> 22
<212> PRT
<213> Artificial Sequence

<220>
<221> signal
<223> Synthetic signal peptide

<400> 35
Met Pro Thr Trp Ala Trp Trp Leu Phe Leu Val Leu Leu Ala Leu
1           5           10          15

Trp Ala Pro Ala Arg Gly
20

<210> 36
<211> 733
<212> DNA
<213> Homo sapiens

<400> 36
ggatccgga gccccaaatct tctgacaaaaa ctcacacatg cccaccgtgc ccagcacctg      60
aattcgaggg tgcaccgtca gtcttctct tccccccaaa acccaaggac accctcatga     120
tctcccgac tcctgaggc acatgcgtgg tggtgacgt aagccacgaa gaccctgagg     180
tcaagttcaa ctggtagtgc gacggcgtgg aggtgcataa tgccaagaca aagccgcggg     240

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| | |
|---|-----|
| aggaggcagta caacagcacg taccgtgtgg tcagcgtcct caccgtccctg caccaggact | 300 |
| ggctgaatgg caaggagtac aagtgcagg tctccaacaa agccctccca acccccatacg | 360 |
| agaaaaccat ctccaaagcc aaagggcagc cccgagaacc acagggtgtac accctgcccc | 420 |
| catccccggga tgagctgacc aagaaccagg tcagcctgac ctgcctggtc aaaggcttct | 480 |
| atccaaagcga catcgccgtg gagtgggaga gcaatggca gccggagaac aactacaaga | 540 |
| ccacgcctcc cgtgctggac tccgacggct ccttcttcct ctacagcaag ctcaccgtgg | 600 |
| acaagagcag gtggcagcag gggAACGTCT tctcatgctc cgtgatgcat gaggctctgc | 660 |
| acaaccacta cacgcagaag agcctctccc tgtctccggg taaatgagtg cgacggccgc | 720 |
| gactctagag gat | 733 |

<210> 37

<211> 5

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<213> Artificial sequence

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<221> misc_feature

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<400> 37

Trp Ser Xaa Trp Ser

1

5

<210> 38

<211> 86

<212> DNA

<213> Artificial Sequence

<220>

<221> primer_bind

<223> forward primer useful for generation of a synthetic gamma activation site (GAS) containing promoter element

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gcgccctcgag atttccccga aatcttagatt tccccgaaat gattttcccg aaatgatttc

60

cccgaaatat ctgccatctc aattag

86

<210> 39

<211> 27

<212> DNA

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<213> Artificial Sequence
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 <221> primer_bind
 <223> reverse primer useful for generation of a synthetic gamma activation site
 (GAS) containing promoter element

<400> 39
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<210> 40
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 <212> DNA
 <213> Artificial Sequence

<220>
 <221> misc_feature
 <223> Synthetic GAS-SV40 promoter sequence

<400> 40
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 aaatatctgc catctcaatt agtcagcaac catagtcccg cccctaactc cgcccatccc 120
 gcccctaact ccgcccagtt ccgcccattc tccgccccat ggctgactaa tttttttat 180
 ttatgcagag gccgaggccg cctcggcctc tgagctattc cagaagttagt gaggaggctt 240
 ttttggaggc cttaggctttt gcaaaaagct t 271

<210> 41
 <211> 32
 <212> DNA
 <213> Artificial Sequence

<220>
 <221> primer_bind
 <223> primer useful for generation of a EGR/SEAP reporter construct

<400> 41
 gcgctcgagg gatgacagcg atagaacccc gg

<210> 42
 <211> 31
 <212> DNA
 <213> Artificial Sequence

<220>
 <221> primer_bind
 <223> primer useful for generation of a EGR/SEAP reporter construct

<400> 42
 gcgaagcttc gcgactcccc ggatccgcct c

<210> 43
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 <212> DNA

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<213> Artificial Sequence

<220>

<221> misc_binding

<223> NF-KB binding site

<400> 43

ggggactttc cc

12

<210> 44

<211> 73

<212> DNA

<213> Artificial Sequence

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<221> primer_bind

<223> forward primer useful for generation of a vector containing the NF-KB promoter element

<400> 44

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60

ccatctcaat tag

73

<210> 45

<211> 256

<212> DNA

<213> Artificial Sequence

<220>

<221> misc_feature

<223> Synthetic NF-KB/SV40 promoter

<400> 45

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60

caattagtca gcaaccatag tccccccctt aactccgccc atcccccccc taactccgccc

120

cagttccgccc cattctccgc cccatggctg actaattttt ttatattatg cagaggccgaa

180

ggccgcctcg gcctctgagc tattccagaa gtatgtggaa ggcttttttg gaggccttagg

240

cttttgcaaa aagctt

256

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